## Testimony before the Michigan House Committee on Health Policy and the

Michigan House Committee on Children, Families and Seniors

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Good morning. My name is Dr. Gillian Stoltman. I would like to thank you for this opportunity to address this important issue. I am currently the Health Officer for Kalamazoo County. I was trained as microbiologist and did my postgraduate work on the body's immune system responds to infection by viruses. The majority of my professional life has been devoted to understanding and controlling infectious diseases. Between 1997 and 2003 I was the Director of the Division of Communicable Disease and Immunization at the Michigan Department of Community Health. I am also a mother and recently became a grandmother to a beautiful baby boy.

For much of human history, infectious diseases such as whooping cough and measles have robbed families of their infants and babies or left them affected for life. There are still parts of the world today where this is the case today. But not here; not because of expensive, medical equipment; not because of delicate and complex surgery, although both have great value. We do not see these deadly epidemics because of the use of vaccines. Vaccines work by exposing our immune systems to harmless versions of the microbes, so that it can learn how to defend itself should we be exposed to "the real thing" in the future. Thousands of lives are protected each year because of the use of vaccines.

There is a second benefit of vaccines and that is what we call herd or community immunity. This provides protection for people who do not have immunity against these diseases. In all of our communities are people who do not have good immunity – they may be too young or too old, they may have weakened immune systems because they are sick or are on therapy which weakens their immune system, such as for cancer or a transplant. These children and adults must rely on the community collectively to protect them through "herd immunity". For them, it is imperative, it is life-saving, that there are sufficient people who are immune to not let the disease spread and reach them, because they don't have the immunity to be able to defend themselves. For them, this is not a matter of inconvenience; it is literally a matter of life-and-death. A disease cannot spread very far if most people in a community are immune and so high levels of

immunity in a community reduce the risk of a vulnerable person being exposed to the disease – this is herd immunity

Laws have been established to protect the community against these transmissible, serious diseases. Vaccination is very effective in protecting people, which is why we rarely see once common diseases such as polio. But there are

For more than 5 years, parents in Kalamazoo County considering a non-medical waiver have been coming to the health department and talking with a nurse. Our experience is that many parents do not have complete information about the benefits and risks of vaccines, or the consequences of not having a fully immunized child should an outbreak occur. For example we often have parents say that they did not realize that diseases such as whooping cough or measles are still around, or that they were not aware of some of the newer vaccines that can protect against meningitis.

We know that parents are worried when they hear about news reports saying that vaccines cause autism, that too many vaccines can overwhelm a baby's immune systems; that vaccines can cause the disease that they are supposed to protect against. Of course they are concerned; no parent wants to harm their child. However, the facts tell us that vaccines do not cause autism and that a baby's immune system deals well with hundreds of microbes and proteins every day. Some vaccines do appear to cause symptoms such as a slight fever, redness at the site of injection, but these are signs of the immune system responding to the vaccine, not the occurrence of disease.

We came into the medical professions because we care; We understand the concerns — we are parents and grandparents; but we know that vaccines not only protect the lives of our children and grandchildren, but they also protect the lives of those of all ages who are medically vulnerable, for them chickenpox or measles are not inconveniences, they are potentially deadly. Requiring a discussion with a well-informed public health nurse about immunization is sound public health policy to protect all of our citizens.

Thank you for allowing me to testify before the committee today.

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